



# PROCEEDINGS

## The 5<sup>th</sup> National and International Research Conference 2022 NIRC V 2022

*“Universities for Local Development Based  
on Sustainable Development Goals”*



QR Code รายงานการประชุมระดับชาติ  
(QR Code for National Proceedings)

QR Code รายงานการประชุมระดับนานาชาติ  
(QR Code for International Proceedings)



14 February 2022

Buriram Rajabhat University

(Online & Onsite)

ISBN (e-book) : 978-974-692-444-3

# CONTENTS

|   | Page      |
|---|-----------|
| <b>Science and Technology (Oral Presentation)</b>   | <b>1</b>  |
| A Career Path in The Regional Universities of Turkey for Sustainable Development : Lessons Learned<br>İlhan Çağırğan  | 2         |
| Life Cycle of <i>Papilio demoleus malayanus</i> Wallace, 1865 on Host Plant of Family Rutaceae in Minsu Environs in Kyaukse Township<br>Khin Myat Kyu   | 3         |
| Genetic Diversity of the Genus <i>Thunbergia</i> Using ISSR and SRAP Markers<br>Natpakun Ampun Pheravut Wongsawad   | 11        |
| Utilization of Yeast-Fermented Broken Rice as Native Chicken Feed<br>Narumon Somkuna  | 20        |
| <b>Health Sciences (Oral Presentation)</b>  | <b>21</b> |
| Effect of Opaque Porcelain Firing Temperature and Holding Time upon Interfacial Fracture Toughness of Milling Metal-Ceramic Alloys<br>Nuttida Rengpattanakij Niwut Juntavee   | 22        |
| The Effect of Different Sintering Times and Temperatures on the Translucency of Monolithic Zirconia<br>Chutikarn Jaralpong Niwut Juntavee   | 34        |
| Effects of Walking Combined with Arms and Legs Weight Loading Exercise on Physical Performance in Elderly Women<br>Wareerat kokittipong Pruchaya Chumvangvapee Piyawat Luesopha Cherdasak Kaewkamada Widsarut Sekaew Kittikoon Boonkate | 46        |
| Effects of High-intensity Interval Training on Obesity: A Mini Review<br>Minjun Liang Yang Song Yaodong Gu  | 55        |
| Pathological Effects on Biomechanical Function and Strategy Adjustments during Gait Termination: A Systematic Review<br>Yuhuan He Xuanzhen Cen  | 62        |



## CONTENTS *(Continued)*

|  | Page       |
|--|------------|
| <b>Humanities and Social Sciences (Oral Presentation)</b>  | <b>73</b>  |
| Conservation and Ecotourism : Case Study of Don Island, Myeik Archipelago, Myanmar<br>Saw Pyone Naing    Khin Ohnmar Htwe                          | 74         |
| The Study of Murals Illustrating the Sutta Nipāta Found in the Ancient Temples<br>of Pakokku Region<br>Tin Lin Phyo                                | 75         |
| Overviewing the Organizational Culture of Historical Masterpiece in Bagan<br>Lwin Zar Naing Win  | 88         |
| A Study of Motivation and Attitudes towards English Language Learning<br>by Hmong EFL learners<br>Natcha Charoenthongmankhong    Apichai Rungruang | 105        |
| A Study of the Buddha Image made of Bamboo-Strips at the Shwe San Daw Pagoda<br>in Pyay<br>Pon   Pon   | 106        |
| The Moral Study of Some Myanmar Poems in Myanmar Literature<br>Daw Pyae    Mya Mya    Min Theik    Me Me Aung                                      | 113        |
| Research on Jingdezhen Ceramic Industry Tourism under the Background<br>of National Strategy<br>Cai Lingling                                       | 124        |
| Expectations of Young Professionals on Community Engagements Towards<br>Sustainable Development Goals : an Exploration<br>Ma. Jesusa Ridor-Unciano | 133        |
| <b>Education (Oral Presentation)</b>   | <b>148</b> |
| Sustaining Quality Education in the New Normal Through Constructivism<br>and Constructive Alignment<br>Mario P. Obrero                             | 149        |
| Elevating Global Partnerships in Higher Education during the Covid 19 Pandemic :<br>The Juxtaposition of SDGs 14 and 17<br>R. Michael Smith        | 152        |

## CONTENTS *(Continued)*

|  | Page |
|--|------|
| Multilingualism and Its Impact in North-East India<br>Irom Gambhir Singh   | 153  |
| Attitudes towards Multilingualism at Secondary Schools in Bangladesh<br>Sree Bidhan Chakraborty Himadri Sekhar Roy   | 154  |
| Student Centred learning in the 21 <sup>st</sup> Century<br>Willy A Renandya   | 155  |
| The Role of Youngers for Global Sustainable Governance : The Implication<br>for Higher Education Innovation<br>Ted Yu-Chung Liu  | 156  |
| The Role of Vocational Training in Myanmar<br>Ni Ni Oo   | 157  |
| A Synthesis Study of Writing Approaches Employed in the Researches<br>on Teaching Writing<br>Sittisak Pongpuehee Nawamin Prachanant Saowarot Ruangpaisan   | 167  |
| Effectiveness of Using an Outcome-based Approach to Design Contents of an In-service<br>Training Program for Training secondary school English Teachers in Laos<br>Lakaisone Saiyachit                     | 176  |
| The Effects of Using Padlet Application (PA) to Enhance Writing Ability of English-Majored<br>Students at Savannakhet Teacher Training College, Lao PDR<br>Phouangphet Sounthalavong Khonesak Keomaneevong | 177  |
| Learning Achievement and Satisfaction by Using Collaborative Learning<br>in Information System Analysis Course<br>Passakorn Chumpoonta   | 178  |
| Improving Grade 3 Students' Vocabulary Knowledge through Communicative Activities<br>Thidarat Klachiew Saowarot Ruangpaisan Nawamin Prachanant   | 188  |
| Administration Psychology Model of University in Thailand<br>Nipa Pongvirut  | 200  |



## CONTENTS (Continued)

|  | Page |
|--|------|
| Blended Learning During Pandemic Corona Virus: Teachers' and Students' Perceptions at Chaiyaphum Rajabhut University<br>Ratchakorn Praseeratesung                        | 201  |
| A Synthesis Study of Assessing Learners' Pragmatic Competence<br>Jansuda Boontree Nawamin Prachanant Saowarot Ruangpaisan  | 212  |
| Study Abroad Opportunities and Intercultural Competencies of University Students in Myanmar<br>Ni Ni Hlaing  | 223  |
| A Need Analysis of Blended Learning to Enhance Chemistry Specialization Students' Metacognitive Skills and Attitudes<br>Mya Thet Mon                                     | 225  |
| University Students' Self-Efficacy, Attitudes, and Intentions toward Chemistry : Myanmar Context<br>Mya Thet Mon   | 226  |
| An Analysis of Illocutionary Acts in the Short Story <i>A Small Sacrifice for an Enormous Happiness</i> by Jai Chakrabarti<br>Khin Hsu Thwe                              | 227  |
| The General Attitude of Students and Teachers towards Effectiveness of Using Short Stories in EFL Classrooms of Myanmar<br>Mary Akkarapon Nuemaihom Kampeeraphab Intanoo | 236  |
| Benefits of Dramatic Play for Enhancing University Students' Understanding of Poetry<br>Mary Akkarapon Nuemaihom Kampeeraphab Intanoo                                    | 237  |
| Gender and Language Use in Myanmar Context<br>Soe Moe Thu Wilai Phiwma   | 238  |
| The Effect of Classroom Interaction on Developing the Learner's Speaking Skill : Myanmar Context<br>Soe Moe Thu Wilai Phiwma   | 250  |
| A Synthesis Study of literary Texts to Enhance EFL Students' Critical Reading Skills<br>Siraprapha Ratanaruamkarn Surachai Piyanukool Akkarapon Nuemaihom                | 251  |

## CONTENTS *(Continued)*

|   | Page |
|---|------|
| Building Students' Global Competency in English Language Classrooms at Undergraduate Level in Myanmar<br>Yee Mon Cho Akkarapon Nuemaihom Kampeeraphab Intanoo             | 263  |
| Implementation of Teaching Practices with Respect to the Integration of Global Citizenship : ELT Context<br>Yee Mon Cho Akkarapon Nuemaihom Kampeeraphab Intanoo          | 264  |
| ICT Skills and Challenges Faced by High School Teachers of Inle Lake Located in the Nyaungshwe Township of Shan State in Myanmar<br>May Theint Thu                        | 265  |
| The 21 <sup>st</sup> Century Learning Needs of University Students: Teachers' Perception<br>May Thein Thu   | 266  |
| University Students' Perceptions on 21 <sup>st</sup> Century Learning Skills: Myanmar Context<br>Khine Zin Thant Jasmine Kong-Yan Tang                                    | 267  |
| Uses and Limitations of Questionnaires in Social Science Research<br>Khine Zin Thant Jasmine Kong-Yan Tang  | 268  |
| Foreign Language Anxiety and Test Anxiety of University Students : Myanmar Context<br>Su Mon Aung   | 269  |
| Foreign Language Classroom Anxiety and Reading Anxiety of EFL Students in Myanmar<br>Su Mon Aung  | 270  |
| An Error Analysis of Thai into English Translation of Second-Year English Majors<br>Somyong Som-In kampeeaphab Intanoo Akkarapon Nuemaihom                                | 271  |
| Beliefs of University Teachers: Personal Skills of Teacher Leaders<br>Zarni Mar Peng Qingyue Chang Woojin   | 282  |
| Student Perception on Traditional English Language Testing in a Myanmar Context<br>Aye Aye Mar  | 283  |
| Teachers' Perceptions on the Effectiveness of Group Work and Pair Work towards CLT in ELT Classrooms<br>Ohnmar Win Yee Mon Cho<br>Nawamin Prachanant Saowarot Ruangpaisan | 284  |

## CONTENTS *(Continued)*

|  | Page |
|--|------|
| Professional Development Needs of Myanmar University Teachers of English<br>Kyaw Sein  | 285  |
| Culture Learning in Myanmar EFL Context<br>Kyaw Sein   | 286  |
| Assessment Practice of English Language Teachers in Myanmar<br>Zarni Mar   | 287  |
| Confucian Conception of Critical Thinking in Teaching English as a Foreign Language<br>in Myanmar<br>Soe Darli Wai   | 288  |
| Challenges in Academic Research Experienced by Postgraduate Students<br>in Myanmar Higher Education Context<br>Soe Darli Wai   | 289  |
| Effects of Virtual Classrooms on English Language Skills and Learning Aspects<br>: Review of Recent Cases under COVID-19 Pandemic<br>Yuttachak Lamjuanjit Nawamin Prachanant Chukiat Jarat                         | 303  |
| Quality Enhancement of Master’s Supervision in Chemistry Specialization<br>at Selected Universities in Myanmar<br>Thinn Myat Nwe Tika Ram Pokharel   | 317  |
| Successful Studying in Doctoral Education of Myanmar : Botany Specialization<br>Nwe Nwe Hninn  | 318  |
| The Effects of Captioned Videos on Vocabulary Learning : A Meta-analysis<br>Aung Myo Hein  | 319  |
| Teaching Professionals' Opinions and Views on Experiences of Attending Academic<br>Conferences<br>Than Than Win  | 320  |
| Successful Leadership and Student Outcomes at Universities in Myanmar<br>Khin Mar Mar  | 321  |
| Study of Flipped Classroom Teaching Method together with Cyberspace Learning to<br>Promote Chinese Contemporary Literature History Achievement of University Students<br>Chang Yipeng Nitikorn Onyon Mesa Nuanstri | 322  |

## CONTENTS *(Continued)*

|   | Page |
|---|------|
| <p>The Effect of Learning Management Using Cooperative Learning together with Superstar Mobile Library Application to Enhance the Searching for Information Ability of University students<br/>Reviewer Regina<br/>Yuan Liangzhi Nitikorn Onyon Thitiporn Pichayakul</p>      | 333  |
| <p>A Synthesis Study of Metacognitive Strategies Employed in the Researches on Teaching Reading<br/>Wiphaporn Dangsi Chookiat Jarat Nawamin Prachanant</p>  | 342  |
| <p>The Effect of Aided-study Class Teaching Mode on Mathematics Achievement of Grade 4 Students in Primary Schools<br/>Zhang Ancheng Suwana Juithong Phithack Nilnopkoon</p>  | 356  |
| <p>The Effect of Cooperative Learning Using STAD Technique on Mathematics Achievement of the Fourth Grade Students in Primary Schools<br/>Yang Pengfei Phithack Nilnopkoon Suwana Juithong</p>  | 363  |
| <p>Effect of Learning Management by Using Davies Instructional Model on Ability of Automobile Engine Disassembly and Adjustment and Learning Achievement of Students in Jiangsu Electronic Information Vocational College<br/>Yin Yao Phithack Nilnopkoon Suwana Juithong</p> | 370  |
| <p>A Study of Dalcroze Music Teaching Method on Music Class to Promote Musical Literacy of Primary School Students<br/>Zhaoyi Phithack Nilnopkoon Kanreutai Klangphahol</p>   | 380  |
| <p>Study of Case Study Method through Microteaching Method to Enhance Teaching Practice Skills of Students Majoring in Chinese Language and Literature<br/>Xiao Qianlin Sombat Kotchasit Angkana Karanyathikul</p>  | 387  |
| <p>Effect of Learning Management Using Problem-Based Learning together with the Mobile Phone Application on Students' Learning Achievement and the Ability of Landscape Design of College Students<br/>Huangfu Zhounan Sombat Kotchasit Kanreutai Klangphahol</p>             | 396  |
| <p>The Effect of BOPPPS Teaching Method on Learning Achievement and Dance Performance of University Students<br/>Zhu Fengling Sombat Kotchasit Wang Tiansong</p>  | 403  |



## CONTENTS *(Continued)*

|  | Page |
|--|------|
| Effect of Problem-Based learning (PBL) on Music Teaching Scheme Design and Teaching Practice of Music Normal Students<br>Feifei Guo Premjit Kajonpai Larsen Rekha Arunwong   | 411  |
| International Practicum: What Students Gain and Are Challenged<br>Bao Kham   | 420  |
| Study of Problem-Based Learning Together with Questioning Technique to Promote Choreography Ability of Dance Students<br>Wang Di Premjit Kajonpai Larsen Rekha Arunwong  | 421  |
| Study of Problem-Based Learning Approach for Enhancing Learning Achievement and Students' Satisfaction Among the First Year Students on Fundamentals of Information Technology Course, Zhoukou Normal University<br>Li Xiaofeng Lerlak Othakanon Danucha Saleewong | 430  |
| Study of State and Problems on Learning Management and Propose Guidelines on Ideological and Political Education Courses in Xinzhou Teachers University<br>Dou Jiayu Lerlak Othakanon Wassaporn Jirojpan   | 439  |
| Ambiguity Found in Advertisements<br>Tin Moe Yi  | 455  |
| Practicing Home Visit Program for School Resilience and School Effectiveness Amid the Covid-19 Pandemic Crisis : A case study of a primary school in Central Lombok, Indonesia.<br>Zobi Mazhabi Yoyok Amirudin   | 466  |
| Factors Influencing the Effectiveness of Quality Sub-District School Administration in Nakhonchaiburin Provinces<br>Piyapat Klumgen Narumon Sakpakornkan Supatra Rukkarnsil  | 467  |
| A Collocational Error Analysis in English Narrative Essay Written by English Major Students<br>Thanakorn Kamolwet Chookiat Jarat Nawamin Prachanant  | 479  |
| Educational Strategies Aimed to Improving Student Nurse's Medication Calculation Skills :<br>A Systemic Review<br>Nongnuch Homniam Siripinya Trakunram   | 489  |

## CONTENTS *(Continued)*

|  | Page       |
|--|------------|
| On the Improvement Strategies of University Leaders' Literacy in Coping with Public Opinion Pressure<br>Chen Jianping    Kraphan Sri Ngan  | 501        |
| Deepening the Integration of Production and Education to Boost Regional Economic Development Explore New Modes of School-enterprise Cooperation<br>Jiang Renfeng    Kraphan Sri Ngan | 502        |
| Exploring Student Engagement with Corpus Feedback on English Writing<br>Nguyen Vu Quynh Nhu    Nguyen Hoang Hanh An  | 503        |
| Personal Narratives : A Pedagogical Intervention in Writing<br>Christian Cudiamat Gandeza    Ma. Jesusa Ridor-Unciano  | 516        |
| Personal Growth Development of Students' Literary Appreciation<br>Wendell A. Lived    Ma. Jesusa Ridor-Unciano   | 528        |
| <b>Reviewers</b>   | <b>542</b> |
| <b>Commentators</b>  | <b>548</b> |
| <b>Editorial Board</b>   | <b>551</b> |



## The Effect of BOPPPS Teaching Method on Learning Achievement and Dance Performance of University Students

Zhu Fengling<sup>1</sup> Sombat Kotchasit<sup>2</sup> Wang Tiansong<sup>3</sup>

<sup>1</sup>M.Ed. Student, Curriculum and Instruction Program,  
Valaya Alongkron Rajabhat University under the Royal Patronage, Thailand  
1002296153@qq.com

<sup>2,3</sup> Curriculum and Instruction Program, Valaya Alongkron Rajabhat University under the Royal Patronage, Thailand  
sombat@vru.ac.th  
tiansong@vru.ac.th

### Abstract

This research aimed to: 1) To compare students' learning achievement before and after learning with the BOPPPS teaching method. 2) To compare students' dance performance after learning with the BOPPPS teaching method with the established 70% criterion. The samples were 30 third-year students (one class) in the department of dance studying Training Philosophy of Dance course obtained by cluster sampling method. The research instruments were lesson plans, learning achievement test and dance performance evaluation form. The statistics employed to analyze the quantitative data were percentage, mean, standard deviation and t-test (dependent). The results revealed that: The students' learning achievement after learning with the BOPPPS teaching method was higher than before. The students' dance performance after learning with the BOPPPS teaching method was higher than the established 70% criterion at significant level of 0.05.

**Keywords :** BOPPPS Teaching Method, Learning Achievement, Dance Performance

### 1. Introduction

Dance, as a unique form, has irreplaceable significance and value in the construction of socialist spiritual civilization and the promotion of human's all-round development. Dance majors usually need early professional dance training as the foundation. During the undergraduate period, they will achieve comprehensive development from three aspects namely knowledge, quality and ability training. Finally, they will achieve all-round development in dance skills, cultural literacy and creative thinking through the combination of professional skills, artistic accomplishment, the creation in class and artistic practice. (National standard for teaching quality of music and dance, 2020)

Training Philosophy of Dance, as a compulsory course of dance major, plays a crucial role in the whole process of dance learning. Training Philosophy of Dance is a course combining theory and practice. It is usually offered in the third year of university. The main teaching goal is to let students master the training system of different kinds of dance. Students are expected to achieve accurate and infectious dance performance of different types of dance with their professional ability shaped by the scientific training system. (Yangou, 2009)

BOPPPS teaching method originated from teacher skills training in Canada. It is a teaching target-oriented and student-centered teaching method. It divides the whole teaching process into six stages namely: Bridge in, Objective or Outcome, Pre-assessment, Participatory learning, Post-assessment and Summary. First, pique students' learning interest. Then inform them of the teaching goal before teaching to achieve the goal orientation. Next have a pre-test to have a clear picture of the students' knowledge reserves. Design interactive participatory teaching activities according to the results of the test. Post assessment to see the learning progress after those teaching activities. Finally comes the teaching summary, which works as the introduction of the teaching session as well. The method has a clear train of thought throughout the whole process, from the shallow to the deep, from the outside to the inside, stating from interest and ending with the summary, which is closely connected and in line with the cognitive law of people. Therefore, this method is highly promoted by many university teachers who are familiar with it and carry out applied research and practice in their own classroom teaching. (Sun Jinping, 2019)

I am a university teacher and work at a normal university in Hebei, China. The courses I teach mainly include Training Philosophy of Dance, Appreciation of Dance Works and Dance Techniques. My research questions were: 1) How does students' learning achievement before and after learning with the BOPPPS teaching method? 2) How does students' dance performance after learning with the BOPPPS teaching method compare with the established 70% criterion? (Yu Miaomiao, 2011)

I hope to find scientific and systematic dance teaching system, fully tap the students' learning potential, and realize the comprehensive development of students. Based on the reasons above, we choose to study the influence of BOPPPS teaching model on improving the academic performance and dance performance of students majoring in dance.

## 2. Research Objectives

This research consisted of two objectives:

2.1 To compare students' learning achievement before and after learning with the BOPPPS teaching method.

2.2 To compare students' dance performance after learning with the BOPPPS teaching method with the established 70% criterion.

### 3. Research Methodology

#### 3.1 Samples

The population of this study were 180 students of third-year (six classes) in the department of dance, Conservatory of Music, Lang fang Normal University, Hebei Province, China. The samples were 30 students (one class), which selected randomly through probability sampling techniques by the clusters random sampling method.

#### 3.2 Research Instruments

The research instruments were lesson plans, learning achievement test and dance performance evaluation form. The statistics used to analyze the quantitative data were percentage, mean, standard deviation, t-test (dependent) analysis.

For example: one lesson plan using BOPPPS teaching method.

**Table 1**

Lesson plan : Training philosophy of dance  
Instructional Topic : Flexibility training in dance  
Class Level : The third grade  
Number : 30 students  
Times :120 minutes

|   |   |
|---|---|
| Objectives                                  | <ol style="list-style-type: none"> <li>1. Students understand the concepts of flexibility, classification of flexibility and significance of flexibility training.</li> <li>2. Students know the means and methods of dance flexibility training through actual movement exercises.</li> <li>3. Students understand the mind map about the basic principles and main characteristics of dance flexibility training.</li> <li>4. Students know how to design a preliminary plan suitable for children's flexibility training.</li> </ol> |
| Content                                     | Concepts of flexibility, classification of flexibility and significance of flexibility training, means of flexibility, method of flexibility.   |
| Media and Learning Resources                | Media: Power point presentations Instructional video<br>Text Books: <i>Training Philosophy of Dance</i> and <i>Anatomy of Dance</i><br>Auxiliary equipment: mat, handle bar, tension belt   |
| Instructional Strategies (teaching methods) |   |
| Bridge-in                                   | Play the video of Chinese classical dance technique, and attract the students' attention by appreciating the difficult technique movements. Let   |



|                        |   |
|------------------------|---|
|                        | the students think about how to realize the exquisite technique. This leads to the learning objectives and tasks of this course.  |
| Outcome                | <p>The teacher introduces the teaching objectives of this class to the students:</p> <ol style="list-style-type: none"> <li>1) Students can explain concepts of flexibility, classification of flexibility and significance of flexibility training.</li> <li>2) Students can show the means and methods of dance flexibility training through actual movement exercises.</li> <li>3) Students can present the mind map about the basic principles and main characteristics of dance flexibility training.</li> <li>4) Students can design a preliminary plan suitable for children's flexibility training.</li> </ol>  |
| Pre-assessment         | Student have the pre-test knowledge of this lesson plan. Then, through sharing their own experience in the process of flexibility training, students can understand how much they have mastered the knowledge and methods of flexibility training.  |
| Participatory Learning | <ol style="list-style-type: none"> <li>1) Teacher's explanation: Firstly, teachers will explain and demonstrate the characteristics, principles and requirements of flexibility training with PPT.</li> <li>2) Students' participation: Students are divided into six groups to practice flexible movements, including three means and two methods. The three means are: using external tools, relying on external forces, using their own power. The two methods are static tensile method, dynamic tensile method.</li> <li>3) Interactive session: After the movement exercise, each group will perform the movement demonstration. Each group recommends one student to be the speaker, the speaker will use a mind map for a presentation. The other students demonstrate actions. While students are sharing, teachers can supplement their knowledge.</li> </ol> |
| Post-assessment        | Student have the post-test knowledge of this lesson plan. Then, through the method of asking questions, understand the students' grasping of dance flexibility training knowledge.  |
| Summary                | The teacher evaluates the achievement of students' learning objectives through the comparison between post-test and pre-test knowledge points, summarizes the content and knowledge points of this course, and predicts the learning content of the next class.   |

### 3.3 Data Collection

The stages of data collection were as follows: The samples were pre-test for learning achievement before teaching according to the lesson plans. The samples were taught according to the lesson plans using the BOPPPS teaching method in the classroom and observed dance performance of students. After being taught according to the lesson plans, the samples would be given post-test for learning achievement and dance performance.

The methods of developing the research tools were discussed as follows:

3.3.1 Regarding pre-test and post-test of training philosophy of dance: There were 25 choice questions. There were four options for each choice question, including single and multiple multiple-choice questions. The content included five aspects: flexibility training in dance, core strength ability training in dance, speed training in dance, agility training in dance, endurance training in dance.

3.3.2 The dance performance evaluation form: It included Body, Action, Time, Space and Energy. The final score was the average of five points for Body, Action, Time, and Space and Energy. The final score was the average of five points for Body, Action, Time, and Space and Energy.

### 3.4 Data Analysis

Data analysis were: 1) Reliability of the research tools was used by Cronbach reliability, the validity of the research tools was analyzed by three experts of IOC. The value of the reliability of dance test equals 0.972. The value of the reliability of dance performance evaluation form equals 0.949. The contents validity of two research tools IOC= 1.00. The data above indicates that the two research tools had high reliability and validity and can be used as research tools. 2) Students' learning achievement score after learning with the BOPPPS teaching method was  $\bar{X}=86.40$ , S. D. = 8.95 were higher than before learning with the BOPPPS teaching method was  $\bar{X}=77.33$ , S.D.=10.03 at .05 level statistical significant. The average score for the students' dance performance after using the BOPPPS teaching method was  $\bar{X}=84.27$ , S. D. = 8.12 which was statistically higher than the criterion of 70% at the .05 level of statistical significance.

## 4. Research Results

The results were presented according to the research objectives as follows:

4.1 Results of comparing learning achievement with the BOPPPS teaching method before and after by using t-test for dependent sample.



**Table 2** To compared students' learning achievement before and after using BOPPPS teaching method.

| Group              | N  | Pre-test  |       | Post-test |      | t     | p    |
|--------------------|----|-----------|-------|-----------|------|-------|------|
|                    |    | $\bar{X}$ | S.D.  | $\bar{X}$ | S.D. |       |      |
| Experimental group | 30 | 77.33     | 10.03 | 86.40     | 8.95 | 15.82 | .000 |

P\* < 0.5

As shown in table 2, after receiving the BOPPPS teaching method, the student got  $\bar{X}$ =86.40, S.D.=8.95 (post-test) higher than before, with was  $\bar{X}$ =77.33, S.D.=10.03 (pre-test) at .05 level of statistical significance.

4.2 Results of comparing students' dance performance after learning with the BOPPPS teaching method with the established 70% criterion by using t-test for one sample.

**Table 3** To compare students' dance performance after learning with the established 70% criterion.

| Group              | N  | Full score | Criteria score | $\bar{X}$ | S.D. | t    | p    |
|--------------------|----|------------|----------------|-----------|------|------|------|
| Experimental group | 30 | 100        | 70%            | 84.27     | 8.12 | 42.7 | .000 |

P\* < 0.5

As shown in table 3, after leaning with BOPPPS teaching method, the average score for the students' dance performance was  $\bar{X}$ =84.27, S.D.=8.12 which was statistically higher than the criterion of 70% at .05 level of statistical significance.

## 5. Discussion

The following points based on the research results were discussed:

5.1 The prominent problem in the traditional dance teaching is that teachers are the main body of teaching, and students only complete the learning tasks according to the requirements of teachers. Students are not good at active thinking, let alone actively participating in all aspects of learning, which leads to poor academic performance and lack of expression in dance performance. In terms of sample selection, we choose students with moderate grades and a strong willingness to improve their academic performance. Raw data of the samples were collected through classroom observation, student discussion, and pretest, and the teaching plan was designed based on these data results. This was consistent with the sample selection requirements adopted by Chinese scholars when studying the teaching methods. (Yu Miaomiao, 2011)

5.2 The improvement in the samples' academic performance and dance performance ability may be that the initiative of the six steps of the BOPPPS teaching method of the students

had been effectively played. In the bridge-in section, we used many interesting contents and various forms for course import. And students had developed a strong interest in learning about the course content. In the objective / outcome section, set the learning goals that students can achieve, greatly enhanced the students' self-confidence. In the participatory learning section, a favorite part of the students, students could share, show, and discuss, giving full played to their own subjective initiative. Through the pre-test and the post-test, teachers could accurately understand how students completed their course goals, and timely improve the teaching effect. This was consistent with scholars saying that the "BOPPPS" is an "effective", "efficient" and "beneficial" teaching method that can promote students' active participation in classroom learning. (Zhang Jianxun, & Zhulin, 2016)

5.3 The reason for the improvement of students' comprehensive ability may be that the teaching plan emphasizes the cultivation of students' comprehensive ability, and organically combines theoretical learning and practice, especially in dance performance, while paying attention to physical ability performance and paying more attention to the embodiment of artistic connotation, which greatly improves the students' dance performance. Through the experimental group quantifying the teaching effect, digging deep into the data generated, we reflected on the various teaching links, and made the teaching more scientific. This was coincident with scholars who put forward the construction of a "network" core curriculum system thinking. (Ningxing, 2020)

## 6. Conclusions and Recommendations

### 6.1 Summary of the Study

1) The students' post-test average score was  $\bar{X}=86.40$ , S.D.=8.95. The post-test average score increased was 9.07 higher than pre-test. at .05 level statistical significant. The students' learning achievement after learning with the BOPPPS teaching method was higher than before.

2) The average score for the students' dance performance after using the BOPPPS teaching method was  $\bar{X}=84.27$ , S.D.=8.12 which was statistically higher than the criterion of 70% at .05 level of statistical significance.

### 6.2 Implications of the study

1) Students can develop dance performance using the learning management using the BOPPPS teaching method.

2) Teachers can apply as a guide to develop learners' dance performance using the learning management using the BOPPPS teaching method.

3) The BOPPPS teaching method can improve teaching efficiency and respect students' dominant position in learning. It can help realize the student-centered education concept,

stimulate students' interest and promote students' independent learning. Also, it can enhance the cooperative learning between students and effectively improve the learning effect.

### 6.3 Recommendation

1) The BOPPPS teaching method can be widely used in other dance courses. It is suggested that to use BOPPPS teaching method, the bridge-in should be creative, interesting and arouse interest in learning and the objective should be scientific and measured to determine whether students achieve learning goals. In participatory learning, learning tasks should be arranged in advance to let students take the initiative to participate in learning activities and improve learning efficiency. The class must be summarized, timely reflected and the teaching effect can be constantly improved. For the teachers who will use BOPPPS teaching method, the characteristics of the courses taught should be carefully analyzed, the effectiveness of using this method should be evaluated, and how the teaching plan should be designed in accordance with the BOPPPS teaching method.

2) The BOPPPS teaching method can be used for the teaching ability training of art teachers. Through BOPPPS teaching method, this method can help teachers to develop more teaching plans in line with students' ability, and master more scientific teaching methods and means, so as to improve the teaching level of teachers.

3) The BOPPPS teaching method can be used as a means for students to study by themselves. Through preparation before class, sharing in class and review after class, students not only improve their learning ability, but also develop the learning habit of independent thinking and active participating in learning.

### References

- Danping, C. & Xinyao, Y. (2016). *Canada BOPPPS Teaching Method and its enlightenment for higher education reform*. Research and Exploration in Laboratory
- Jianxun, Z. & Lin, Z. (2016), *Effective classroom teaching design based on BOPPPS method*. Vocational and Technical Education
- Jinping, Su. (2019), *BOPPPS Teaching Model research review*. Professional Teaching
- Miaomiao, Yu. (2011), Current situation and analysis of professional dance education in China. *Journal of Beijing Dance Academy*
- Ou, Y. ( 2009), *Training philosophy of dance*. Shanghai Music Publishing House National standard for teaching quality of music and dance,  
<http://pgb.ouc.edu.cn/bkzyjxzlgljzbz/list.htm>
- Xing, N. (2020), Research on dancers' core literacy and core curriculum construction of performance major. *Journal of Beijing Dance Academy*